8.E.1.1. Students are able to **identify** and **classify** minerals and rocks.

Webb Level: 2

Bloom: Application

Verbs Defined:
Identify – to select from given information
Classify – assign to categories

Key Terms Defined:
Minerals – naturally occurring, solid chemical compounds, that have a crystalline structure and properties that include luster, streak, fracture, cleavage, hardness, color, magnetism and reactivity to acid
Rocks – naturally occurring materials composed of a mineral mixture formed by sedimentary, igneous or metamorphic processes

Teacher Speak:
Students will be able to identify (select from given information) and classify (assign to categories):
- minerals (naturally occurring, solid chemical compounds, that have a crystalline structure and properties that include luster, streak, fracture, cleavage, hardness, color, magnetism and reactivity to acid).
- rocks (naturally occurring materials composed of a mineral mixture formed by sedimentary, igneous or metamorphic processes).

Student Speak:
I can select from given information (identify) and assign to categories (classify):
- naturally occurring, solid chemical compounds, that have a crystalline structure and properties that include luster, streak, fracture, cleavage, hardness, color, magnetism and reactivity to acid (minerals).
- naturally occurring materials composed of a mineral mixture formed by sedimentary, igneous or metamorphic processes (rocks).

8.E.1.2. Students are able to **explain** the role of plate tectonics in shaping Earth.

Webb Level: 2
Bloom: Analysis

Verbs Defined:
Explain- give reasons for

Key Terms Defined:
Plate tectonics - a theory that sections of the Earth's crust are in motion due to convection currents in the mantle
Shaping Earth – formation of plate boundaries, volcanoes, earthquakes and mountains

Teacher Speak:
Students will be able to explain (give reasons for) the role of plate tectonics (a theory that sections of the Earth's crust are in motion due to convection currents in the mantle) in shaping Earth (formation of plate boundaries, volcanoes, earthquakes and mountains).

Student Speak:
I can give reasons why (explain) the theory that sections of the Earth's crust are in motion due to convection currents in the mantle (plate tectonics), has a role in formation of
- plate boundaries
- volcanoes
- earthquakes
- mountains

(shaping Earth).

8.E.1.3. Students are able to **explain** the factors that create weather and the instruments and technologies that assess it.

Webb Level: 2
Bloom: Analysis

Verbs Defined:
Explain – give reasons why

Key Terms Defined:
Factors – air masses, fronts, pressure systems, wind systems, temperature, humidity and, the Coriolis effect
Weather – conditions of the atmosphere
Instruments and technologies – thermometer, barometer, psychrometer and anemometer
Assess - measure

Teacher Speak:
Students will explain (give reasons why) the factors (air masses, fronts, pressure systems, wind systems, temperature, humidity and the Coriolis effect) that create weather (conditions of the atmosphere) and the instruments and technologies (thermometer, barometer, psychrometer and anemometer) used to assess (measure) it.

Student Speak:
I can give reasons why (explain) air masses, fronts, pressure systems, wind systems, temperature, humidity and the Coriolis effect (factors) create conditions of the atmosphere (weather) and are measured (assessed) by thermometers, barometers, psychrometers and anemometers (instruments and technologies).

8.E.1.4. Students are able to **examine** the chemical and physical properties of the ocean to **determine** causes and effects of currents and waves.

Webb Level: 3
Bloom: Application

Verbs Defined:
Examine – tell what happens to
Determine –find appropriate information

Key Terms Defined:
Chemical and physical properties – temperature and salinity
Currents – streams of moving water flowing through the ocean
Waves – movement of energy that creates a ridge or swell moving along the surface of a body of water

Teacher Speak:
Students will be able to tell what happens to (examine) the chemical and physical properties (temperature and salinity) of the ocean to determine (find appropriate

information) causes and effects of currents (streams of moving water flowing through the ocean) and waves (movement of energy that creates a ridge or swell moving along the surface of a body of water).

Student Speak:
I can tell what happens to (examine) the temperature and salinity (chemical and physical properties) of the ocean to find appropriate information (determine) about the causes and effects of streams of moving water flowing through the ocean (currents).

I can tell what happens to (examine) the temperature and salinity (chemical and physical properties) of the ocean to find appropriate information (determine) about the causes and effects of the movement of energy that creates a ridge or swell moving along the surface of a body of water (waves).

8.E.1.5. Students are able to **explain** the impact of weathering and erosion on the Earth.

Webb Level: 3
Bloom: Analysis

Verbs Defined:
Explain - give reasons why

Key Terms Defined:
Impact - soil formation, deposition, land transformations or glaciation
Weathering - physical and chemical breakdown of material due to exposure
Erosion - wearing away of the land by the action of water, ice, or wind

Teacher Speak:
Students will be able to explain (give reasons why) the impact (soil formation, deposition, land transformations or glaciation) of weathering (physical and chemical breakdown of material due to exposure) and erosion (wearing away of the land by the action of water, ice, or wind) on the Earth.

Student Speak:
I can give reasons why (explain) soil formation, deposition, land transformations or glaciation (impact) are caused by physical and chemical breakdown of material due to exposure (weathering) and wearing away of the land by the action of water, ice, or wind (erosion) on the Earth.

8.E.2.1. Students are able to **compare** celestial bodies within the solar system using composition, size, and orbital motion.

Webb Level: 2
Bloom: Analysis

Verbs Defiend:
Compare – tell similarities and differences among

Key Terms Defined:
Celestial bodies – the Sun, planets, asteroids and comets
Composition – what something is made of

Teacher Speak:
Students will be able to compare (tell similarities and differences among) celestial bodies (the Sun, planets, asteroids and comets) within our solar system using composition (what something is made of), size, and orbital motion.

Student Speak:
I can tell similarities and differences among (compare) objects the Sun, planets, asteroids and comets (celestial bodies) within our solar system using what something is made of (composition), size, and orbital motion.

8.E.2.2 Students are able to **differentiate** the influences of the relative positions of the Earth, Moon, and Sun.

Web Level: 2
Bloom: Analysis

Verbs Defined:
Differentiate – state the differences

Key Terms Defined:
Influences of the relative positions – lunar and solar eclipses, moon phases, tides and seasons

Teacher Speak:
Students will be able to differentiate (state the differences) the influences of the relative positions (lunar and solar eclipses, moon phases, tides and seasons) of the Earth, Moon, and Sun.

Student Speak:

I can state the differences (differentiate) in the positions of the Earth, Moon and Sun during lunar and solar eclipses, moon phases, tides and seasons (influences of the relative positions).